**PERMIT NO. HI 0110086**

# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; the "Act"); Hawaii Revised Statutes (HRS) Chapter 342D; and Hawaii Administrative Rules (HAR) Chapters 11-54 and 11-55, Department of Health (DOH), State of Hawaii,

**UNITED STATES DEPARTMENT OF THE NAVY**
**NAVY REGION HAWAII**

(hereinafter PERMITTEE),

is authorized to discharge treated domestic and non-domestic wastewaters to the receiving waters named Mamala Bay through Outfall Serial No. 001 at Latitude 21°17′41"N and Longitude 157°57′06"W, and

storm water runoff associated with industrial activity to the receiving water named Pearl Harbor through Outfall Serial No. 002 at Latitude 21°19′37"N and Longitude 157°57′52"W,

from its NAVFAC Hawaii Wastewater Treatment Plant (Facility) located at Fort Kamehameha Road, JBPHH, Island of Oahu, Hawaii,

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the DOH "Standard NPDES Permit Conditions", that is available on the DOH, Clean Water Branch (CWB) website at: http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2018, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

Failure to comply with any condition, requirement, and/or limitation in this permit is an enforceable violation and your NPDES permit may be terminated. Examples of enforceable violations include, but are not limited to: Unauthorized discharges where a pollutant was not disclosed in the NPDES application, but was detected by monitoring only requirements in the NPDES permit or by other means determined by the DOH; failure to sample, analyze, or submit water quality results as required in the NPDES permit; and discharging pollutants in locations that were not authorized in the NPDES permit. If you violate Hawaii Revised Statutes (HRS), Chapter 342D, you may be subject to penalties of up to $25,000 per violation per day and up to two (2) years in jail.

**FINAL PERMIT**
**April 9, 2020**

Falsification of information, including providing information in the NPDES application that does not match what is actually occurring at the project site/facility, may result in criminal penalties for the Permittee and their authorized representative as provided in Clean Water Act, Section 309 and HRS Section 342D-35.

This permit, including the Zone of Mixing, will become effective on **June 1, 2020**.

This permit, including the Zone of Mixing, and the authorization to discharge will expire at midnight, **May 31, 2025**.

Signed this 9th day of April, 2020

_____
(For) Director of Health

## TABLE OF CONTENTS

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### 1. Outfall Serial No. 001

a. During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge treated domestic and non-domestic wastewater from Outfall Serial No. 001. The discharge shall be limited and monitored as specified below.

| Effluent Characteristics | Discharge Limitations[1] | | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Average Monthly | Average Weekly | Maximum Daily | Units | Measurement Frequency | Sample Type |
| Flow | [2] | --- | [2] | MGD | Continuous/ Estimate[3] | -- |
| Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) | 30 | 45 | [2] | mg/L | 1/Day[3] | 24-Hour Composite |
| | 3,253 | 4,879 | [2] | lbs/day | | |
| | The average monthly percent removal shall not be less than 85 percent | | | | | |
| Total Suspended Solids (TSS) | 30 | 45 | [2] | mg/L | 1/Day[3] | 24-Hour Composite |
| | 3,253 | 4,879 | [2] | lbs/day | | |
| | The average monthly percent removal shall not be less than 85 percent | | | | | |

MGD – Million Gallons per Day

[1] Compliance with mass-based effluent limitations shall be determined using the following formula: lbs/day = 8.34 * concentration (mg/L) * flow (MGD), where design flow = 13.0 MGD

[2] The Permittee shall monitor and report the test results.

[3] Both influent and effluent samples shall be taken. Influent and effluent monitoring shall be conducted on the same day.

| Effluent Characteristics | Discharge Limitations[1] | | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Average Annual | Average Monthly | Maximum Daily | Units | Measurement Frequency | Sample Type |
| pH | Not less than 6.0 and not greater than 9.0 | | | s.u. | 1/Day | Grab |
| Oil and Grease | -- | -- | 10 | mg/L | 1/Day | Grab[3] |
| | -- | -- | 1,084 | lbs/day | | |
| Settleable Solids | -- | 1 | 2 | ml/l | 1/Day | Grab |
| Chronic Toxicity | -- | -- | Pass[4] | -- | 1/Month | 24-Hour Composite |
| Total Residual Chlorine | -- | -- | 0.83 | mg/L | Variable[5] | Grab/ Recorder |
| | -- | -- | 90.26 | lbs/day | | |
| DDT[6] | 0.000888 | -- | 0.111 | µg/L | 1/Month | 24-Hour Composite |
| | 0.000096 | -- | 0.012 | lbs/day | | |
| Enterococci | -- | 35[7] | 14,430[8] | CFU/ 100 mL | 5/Month[9,10] | Grab[11] |

| Effluent Characteristics | Discharge Limitations[1] | | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Average Annual | Average Monthly | Maximum Daily | Units | Measurement Frequency | Sample Type |
| Temperature | -- | -- | [2] | °C | 1/Week | Grab |
| Turbidity | -- | -- | [2] | NTU | 1/Month | Grab |
| Remaining Pollutants[12] | -- | -- | [2] | µg/l | 1/Year | Grab |

[1] Compliance with mass-based effluent limitations shall be determined using the following formula: lbs/day = 8.34 * concentration (mg/L) * flow (MGD), where design flow = 13.0 MGD

[2] The Permittee shall monitor and report the parameter results.

[3] The Permittee shall measure Oil and Grease using EPA Method 1664, Revision A, or another EPA-approved sufficiently sensitive analytical test method that is capable of detecting and measuring the pollutant at, or below, the applicable water quality criteria or permit limits.

[4] "Pass", as described in Section B.3 of this Permit.

[5] When ultraviolet (UV) light disinfection is used, minimum monitoring frequency is once per quarter, when chlorine is used to rehabilitate the sand filter or for foam control, minimum monitoring frequency is continuous for the duration of the chlorine use.

[6] DDT shall mean the sum of 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD.

[7] Compliance based on the monthly geometric mean.

[8] Compliance based on the single sample maximum (STV of 130 CFU/100 mL with dilution of 111:1). Not more than 10% of samples taken within the month shall exceed this value.

[9] Report enterococci as a geometric mean and as a single sample. Provide the % of exceedances within the month and associated data for the Maximum Daily Discharge Limitation.

[10] "5/Month" shall mean five (5) samples per calendar month which shall be equally spaced at six (6) day intervals or unequally spaced at five (5), six (6), seven (7), or eight (8) day intervals, provided that the total period covered is between 25 and 30 days. Consecutive samples shall not be collected on the same day of the week.

[11] Enterococci samples shall be analyzed using Method 1600, *Membrane Filter Test Method for Enterococci in Water* (EPA 821-R-09-016, December, 2009) or the most current EPA approved method specified in 40 CFR 136.

[12] The Permittee shall perform annual monitoring, based on a calendar year, on all remaining pollutants listed in Appendix 1 of this permit, except those already specified in the table above. The use of grab samples may be used, although 24-hour composite samples may be used if indicated in Appendix 1.

| Parameter | Discharge Limitations | | | Monitoring Requirements | |
|---|---|---|---|---|---|
| | Geometric Mean[1] | Single Sample Maximum | Units | Measurement Frequency | Sample Type |
| Ammonia Nitrogen | -- | [3] | µg/L | 1/Month | 24-Hour Composite |
| | -- | [3] | lbs/day[2] | | |
| Nitrate + Nitrite Nitrogen | -- | 8,810 | µg/L | 1/Month | 24-Hour Composite |
| | -- | 955 | lbs/day[2] | | |
| Total Nitrogen | -- | [3] | µg/L | 1/Month | 24-Hour Composite |
| | -- | [3] | lbs/day[2] | | |
| Total Phosphorus | -- | [3] | µg/L | 1/Month | 24-Hour Composite |
| | -- | [3] | lbs/day[2] | | |

[1] To be evaluated on a calendar year.
[2] Compliance with mass-based effluent limitations shall be determined using the following formula: lbs/day = 8.34 * concentration (mg/L) * flow (MGD), where design flow = 13 MGD
[3] The Permittee shall monitor and report the results.

b. Wastewater Treatment Facility Influent

During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the Permittee shall monitor the wastewater treatment facility influent as specified below:

(1) Influent flow, BOD, and TSS shall be monitored as specified in the table above.

(2) Additionally, the wastewater treatment facility influent shall be monitored for the following parameters:

| Parameter | Discharge Limitations | Unit | Minimum Monitoring Frequency | Sample Type |
|---|---|---|---|---|
| Conductivity | [1] | µmhos/cm | 1/Quarter[2] | Grab |
| Oil and Grease | [1] | mg/l | 1/Quarter[2] | Grab[3] |

[1] The Permittee shall monitor and report the parameter results.
[2] "1/Quarter" shall mean once every three (3) calendar months.
[3] The Permittee shall measure Oil and Grease using EPA Method 1664, Revision A, or another EPA-approved sufficiently sensitive analytical test method that is capable of detecting and measuring the pollutant at, or below, the applicable water quality criteria or permit limits.

c. Effluent monitoring for total nitrogen, total phosphorus, ammonia nitrogen, nitrate + nitrite nitrogen, and turbidity shall be conducted on the same day that receiving water monitoring for said pollutants is conducted.

d. Samples taken in compliance with the monitoring requirements in Part A.1. of this permit shall be taken at the following locations:

(1) Influent Monitoring, Monitoring Location INF: All influent samples shall be taken downstream of any additions to the trunk sewer, upstream of any in-plant return flows, and prior to treatment where representative samples of the influent can be obtained.

(2) Effluent Monitoring Location, Outfall Serial No. 001: All effluent samples shall be taken downstream from any additions to the Facility after all treatment processes, and prior to mixing with the receiving waters, where representative samples of the final effluent can be obtained.

**2. Effluent from Source Metal Finishing Operations (through internal outfalls that discharge to the Facility)**

a. During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge treated metal finishing process wastewater from the following internal outfalls:

(1) Existing Source Metal Finishing Operations

| Internal Outfall Serial Nos. | Industrial Wastewater Sources |
|---|---|
| 002I | Building No. 67 |
| 005I | Building No. 214 |
| 010I | Building No. 1670 |
| 013I | PHNSY Drydocks #1, #2, #3, and #4 |

(2) New Source Metal Finishing Operations

| Internal Outfall Serial Nos. | Industrial Wastewater Sources |
|---|---|
| 008I | Building No. 1456 |
| 012I | Building No. 1770 |

(3) Combined Existing and New Source Metal Finishing Operations

| Internal Outfall Serial Nos. | Industrial Wastewater Sources |
|---|---|
| 014I | NAVFAC HI Industrial Wastewater Treatment Complex (IWTC) |

b. The discharge of existing, new, or combined new and existing source metal finishing process wastewater from internal outfalls other than those authorized under this paragraph is prohibited. Authorized discharges shall be limited and monitored by the Permittee as specified below. The metal finishing limits apply to the non-IWTC internal outfalls (i.e., Internal Outfall Serial Nos. 002I, 005I, 010I, 013I, 008I, and 012I) from metal finishing operations only when that waste is discharged directly to the WWTP (i.e., does not go to the IWTC). When the waste is instead directed to the IWTC, the metal finishing limits shall apply to Internal Outfall Serial No. 014I.

| Effluent Characteristics | Discharge Limitations | | | Monitoring Requirements | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Units | Measurement Frequency | Sample Type |
| Flow | Report | | GPD | Daily | Estimate |
| Total Cadmium (Existing Sources)[1] | 0.26 | 0.69 | mg/l | 1/Month[6] | Grab |
| Total Cadmium (New Sources)[2] | 0.07 | 0.11 | mg/l | 1/Month[6] | Grab |
| Total Cadmium (Combined New and Existing Sources)[3] | 0.21 | 0.54 | mg/l | 1/Month[6] | Grab |
| Total Chromium | 1.71 | 2.77 | mg/l | 1/Month[6] | Composite or Grab[7] |
| Total Copper | 2.07 | 3.38 | mg/l | 1/Month[6] | Composite or Grab[7] |
| Total Lead | 0.43 | 0.69 | mg/l | 1/Month[6] | Grab or Composite |
| Total Nickel | 2.38 | 3.98 | mg/l | 1/Month[6] | Composite or Grab[7] |
| Total Silver | 0.24 | 0.43 | mg/l | 1/Month[6] | Composite or Grab[7] |
| Total Zinc | 1.48 | 2.61 | mg/l | 1/Month[6] | Composite or Grab[7] |
| Total Cyanide[4] | 0.65 | 1.20 | mg/l | 1/Month[6] | Grab |
| Total Toxic Organics[5] | -- | 2.13 | mg/l | 1/Month[6] | Grab |

Report Monitoring and reporting required only
GPD Gallons per Day
mg/l Milligrams per Liter

[1] Applies only to Existing Source Metal Finishing Operations that go directly to the WWTP (i.e., does not go to the IWTC for treatment before going to the WWTP).
[2] Applies only to New Source Metal Finishing Operations that go directly to the WWTP (i.e., does not go to the IWTC for treatment before going to the WWTP).
[3] Applies only to Combined New and Existing Source Metal Finishing Operations.
[4] Alternatively, if the Permittee utilizes cyanide treatment, compliance may be determined with the following amenable cyanide limits: Daily Maximum = 0.86 mg/l; 30-day Average = 0.32 mg/l.
[5] See Part A.3 of this permit for definition and specific monitoring requirements for total toxic organics.
[6] 1/Month is the minimum measurement frequency. Samples and measurements taken for the purposes of monitoring shall be representative of the wastewater discharged from the internal outfall during the month. If the wastewater discharge from a certain batch or time period is not representative of the previous batch(es)/time period(s) sampled during the month, additional sampling shall be conducted, to ensure discharges with the highest concentrations of pollutants are monitored. If additional monitoring is performed within the month, the highest value shall be reported. In addition, all exceedances shall be reported.
[7] Continuous discharges shall be composite-sampled (see Part I.5 of this permit) during the period of discharge. Batch discharges shall be grab-sampled from a well-mixed batch resulting in a sample representative of the entire batch discharged.

c. The Permittee shall not augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with the above discharge limitations.

d. Conditions contained in Sections 17 (Bypass) and 18 (Upset) of the DOH *Standard NPDES Permit Conditions*, version 15, are applicable to all authorized internal outfalls that discharge to the Facility.

e. As required in Part A.2., the Permittee shall take all effluent samples prior to discharge to the Facility, and prior to mixing with other non-regulated flows.

## 3. Monitoring Requirements for Total Toxic Organics

a. As specified in 40 CFR §433.11, the term total toxic organics is the summation of all quantifiable values greater than 0.01 milligrams per liter for the following toxic organics:

Acenaphthene
Acrolein
Acrylonitrile
Benzene
Benzidine
Carbon tetrachloride (tetrachloromethane)
Chlorobenzene
Pentachlorophenol
Phenol
Bis (2-ethylhexyl) phthalate
Butyl benzyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate

1,2,4-Trichlorobenzene
Hexachlorobenzene
1,2-Dichloroethane
1,1,1-Trichloroethane
Hexachloroethane
1,1-Dichloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
Chloroethane
Bis (2-chloroethyl) ether
2-Chloroethyl vinyl ether (mixed)
2-Chloronaphthalene
2,4,6-Trichlorophenol
Parachlorometa cresol
Chloroform (trichloromethane)
2-Chlorophenol
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3-Dichlorobenzidine
1,1-Dichloroethylene
1,2-Trans-dichloroethylene
2,4-Dichlorophenol
1,2-Dichloropropane
1,3-Dichloropropylene
(1,3-dichloropropene)
2,4-Dimethylphenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
1,2-Diphenylhydrazine
Ethylbenzene
Fluoranthene
4-Chlorophenyl phenyl ether
4-Bromophenyl phenyl ether
Bis (2-chloroisopropyl) ether
Bis (2-chloroethoxy) methane
Methylene chloride (dichloromethane)
Methyl chloride (chloromethane)
Methyl bromide (bromomethane)
Bromoform (tribromomethane)
Dichlorobromomethane
Chlorodibromomethane

1,2-Benzanthracene
(benzo(a)anthracene)
Benzo(a)pyrene
(3,4-benzopyrene)
3,4-Benzofluoranthene
(benzo(b)fluoranthene)
11,12-Benzofluoranthene
(benzo(k)fluoranthene)
Chrysene
Acenaphthylene
Anthracene
1,12-Benzoperylene
(benzo(ghi)perylene)
Fluorene
Phenanthrene
1,2,5,6-Dibenzanthracene
(dibenzo(a,h)anthracene)
Indeno(1,2,3-cd) pyrene
(2,3-o-phenlene pyrene)
Pyrene
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl chloride (chloroethylene)
Aldrin
Dieldrin
Chlordane (technical mixture and
metabolites)
4,4-DDT
4,4-DDE (p,p-DDX)
4,4-DDD (p,p-TDE)
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide (BHC-
hexachloro-cyclohexane)
Alpha-BHC
Beta-BHC
Gamma-BHC

| | |
|---|---|
| Hexachlorobutadiene | Delta-BHC |
| Hexachlorocyclopentadiene | (PCB-polychlorinated biphenyls) |
| Isophorone | PCB-1242 (Arochlor 1242) |
| Naphthalene | PCB-1254 (Arochlor 1254) |
| Nitrobenzene | PCB-1221 (Arochlor 1221) |
| 2-Nitrophenol | PCB-1232 (Arochlor 1232) |
| 4-Nitrophenol | PCB-1248 (Arochlor 1248) |
| 2,4-Dinitrophenol | PCB-1260 (Arochlor 1260) |
| 4,6-Dinitro-o-cresol | PCB-1016 (Arochlor 1016) |
| N-nitrosodimethylamine | Toxaphene |
| N-nitrosodiphenylamine | 2,3,7,8-Tetrachlorodibenzo-p- |
| N-nitrosodi-n-propylamine | dioxin (TCDD) |

When monitoring for compliance with the total toxic organics limitation, the Permittee need only analyze for those pollutants which would reasonably be expected to be present.

b. In lieu of monitoring for compliance with total toxic organic requirements, the Permittee may develop and implement a solvent management plan as described in Part A.3.c. below, and may make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last Discharge Monitoring Report (DMR). I further certify that this facility is implementing the toxic organic management plan submitted to the permitting authority."

For internal outfall serial nos. 002I through 014I, this statement is to be included as a "comment" on the DMRs required under Part I of this permit and in Section 16, Reporting Requirements, in the DOH *Standard NPDES Permit Conditions*, version 15.

c. In requesting the alternative described in Part A.3.b. above, the Permittee shall develop and submit a solvent management plan to the Director that specifies the toxic organic compounds used; the method of disposal used instead of dumping (e.g., reclamation, contract hauling, or incineration); and the procedures that will be used for ensuring that toxic organics do not routinely spill or leak into the wastewater.

## 4. Outfall Serial No. 002

a. During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge storm water runoff associated with industrial activities at the Facility from Outfall Serial No. 002. The discharge shall be limited and monitored as specified below.

| Effluent Characteristics | Discharge Limitations | | Monitoring Requirements | |
|---|---|---|---|---|
| | Storm Water Limitation[1] | Units | Measurement Frequency[6] | Sample Type |
| Flow | [2] | MGD | 1/Year | Calculated or Estimated |
| Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C) | [2] | mg/L | 1/Year | Grab/Composite |
| Chemical Oxygen Demand | [2] | mg/L | 1/Year | Grab/Composite |
| Total Suspended Solids (TSS) | [2] | mg/L | 1/Year | Grab/Composite |
| Total Phosphorus | [2] | mg/L | 1/Year | Grab/Composite |
| Total Nitrogen | [2] | mg/L | 1/Year | Grab/Composite |
| Nitrate Plus Nitrite Nitrogen | [2] | mg/L | 1/Year | Grab/Composite |
| Oil and Grease | 15 | mg/L | 1/Year | Grab[3] |
| pH | 6.8 – 8.8 | standard units | 1/Year | Grab[4] |
| Enterococci | 89 | CFU/100 ml | 1/Year | Grab/Composite |
| Remaining Pollutants[5] | [2] | µg/L | 1/Year | Grab/Composite |

MGD Million Gallons per Day
mg/l Milligrams per liter
µg/L Micrograms per liter
CFU Colony Forming Unit

1 Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table. Actual or measured levels which exceed those storm water discharge limits or are outside those ranges shall be reported to the Director as required in Part I of this permit. In the event that any of these limitations are exceeded, the Permittee shall continue to monitor and report every representative storm event until the limitations are met, unless otherwise informed by the DOH-CWB. Monitoring results shall be submitted to the DOH-CWB on the DMR form.

2 The Permittee shall monitor and report the flow/analytical test results.

3 The Permittee shall measure Oil and Grease using EPA Method 1664, Revision A, or another EPA-approved sufficiently sensitive analytical test method that is capable of detecting and measuring the pollutant at, or below, the applicable water quality criteria or permit limits.

4 The Permittee shall measure pH within 15 minutes of obtaining the grab sample.

5 The Permittee shall perform annual monitoring on all remaining pollutants listed in Appendix 1 of this permit, except those already specified in the table above.

6 1/Year shall mean once per calendar year.

b. The Permittee shall collect samples for the analysis from a discharge resulting from a representative storm. A representative storm means a rainfall that accumulates more than 0.1 inch of rain and occurs at least 72 hours after the previous measurable (greater than 0.1 inch) rainfall event.

c. For storm water monitoring in accordance with Part A.4. only:

(1) Samples for analysis shall be collected during the first 15 minutes of the discharge and at 15-minute intervals thereafter for the duration of the discharge. If the discharge lasts for over an hour, sample collection may cease.

(2) The sample collected during the first 15 minutes shall be analyzed as a grab sample. If two (2) or more samples are collected, they shall be analyzed as a composite sample.

(3) "Composite sample" means a combination of at least two (2) sample aliquots, collected at periodic intervals. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the flow at the time of sampling or total flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

d. Additional Storm Water Monitoring

The Director may specify additional monitoring requirements and limitations, in addition to the monitoring requirements specified in Part A.4.a. of this permit.

e. Samples taken in compliance with the monitoring requirements in Part A.4. of this permit shall be taken at Outfall Serial No. 002, prior to the storm water discharge to Pearl Harbor Entrance Channel.

f. Storm Water Pollution Control Plan (SWPCP)

The Permittee shall:

(1) Continue to implement its SWPCP to control storm water discharge associated with the Facility until the Permittee develops and submits the updated SWPCP to the Director of Health.

(2) Submit an updated SWPCP to the Director within 60 calendar days after the effective date of this permit. The SWPCP shall be developed to minimize the discharge of pollutants into the receiving water and shall address all storm water outfalls and potential drainage areas. The SWPCP shall meet all applicable requirements specified in HAR Chapter 11-55, Appendix B, and shall include, but not be limited to, the following information:

(a) An updated facility map showing the proposed berm areas adjacent to the drainage channel and facility boundaries.

(b) A detail with dimensions of the berm, including the material composition and stabilization method.

(c) An updated facility drainage map showing the storm water drainage patterns with flow arrows, an outline of the drainage areas, and the location and coordinates of all proposed sampling locations.

(d) An updated storm water monitoring plan, which includes the rationale for selecting sampling locations; sample collection methods and diagrams; quality assurance/quality control methods; procedures that will be implemented to collect storm event information; procedures to allow sample collection during the first 15 minutes of storm water discharge; and procedures to inspect the receiving State waters, storm water runoff, and control measures to detect violations of the basic water quality criteria specified in HAR Section 11-54-4.

(3) Implement the updated SWPCP upon its submittal to the Director.

(4) Review and update the SWPCP as often as needed toward improving the storm water discharge quality and/or control practices, or as required by the Director. Any alteration at the Facility that may impact storm water shall be addressed within the SWPCP prior to being implemented at the Facility.

(5) Revise and update the SWPCP should any single discharge limitation or water quality standard established in HAR Section 11-54-4, for marine waters, be exceeded. The revision shall include BMPs and/or other measures to reduce the amount of pollutants found to be in exceedance from entering storm water runoff.

(6) Report any major changes or revisions to the SWPCP to the Director within 30 calendar days from the date the revisions were made.

(7) Maintain a copy of the SWPCP and documentation of all revisions, as applicable, at the Facility.

## 5. Monitoring Methods

The Permittee shall conduct monitoring in accordance with test procedures approved under 40 CFR Part 136, or unless otherwise specified, with detection limits low enough to measure compliance with the discharge limitations specified in Part A. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the Permittee shall use the test method with the lowest detection limit.

## 6. Waste Load Allocation (WLA) Implementation and Monitoring Plan

The Permittee shall develop and submit a facility-specific waste load allocation (WLA) implementation and monitoring plan to the Director when a Total Maximum Daily Load (TMDL), which specifies WLAs applicable to the Permittee's discharge is approved by the EPA within one (1) year of notification of the approval date.

## 7. Dilution Reopener

The Director may reopen this permit if the Permittee submits an Initial Dilution Study that calculates minimum and average initial dilution using the most critical (conservative) conditions. The study should examine all available data and collect additional data where representation of seasonal or other critical conditions influencing dilution are deficient or absent.

## B. WHOLE-EFFLUENT TOXICITY REQUIREMENTS

1. Monitoring Frequency

   The Permittee shall conduct monthly chronic toxicity tests on flow weighted 24-hour composite effluent samples, in accordance with the procedures outlined below.

   For whole effluent toxicity tests using *Tripneustes gratilla*, if the Permittee experiences difficulty in obtaining gametes or has unacceptable control performance while conducting the sea urchin sperm/fertilization bioassay during a monitoring period, the Permittee shall document its efforts, communicate all attempts to the Director, and report all attempts on the DMR for that monitoring period.

   It shall not be considered a non-compliance of the whole effluent toxicity requirements if it can be proven to the Director's satisfaction that the inability in obtaining gametes for testing was due to circumstances beyond the Permittee's control.

2. Test Species and Methods

   The Permittee shall conduct chronic toxicity testing on *T. gratilla* using Hawaiian Collector Urchin, *Tripneustes gratilla* (Hawa'e) Fertilization Test Method (Adapted by Amy Wagner, EPA Region 9 Laboratory, Richmond, CA from a method developed by George Morrison, EPA, ORD Narragansett, RI and Diane Nacci, Science Applications International Corporation, ORD Narragansett, RI) (EPA/600/R-12/022) and follow Quality Assurance procedures as described in the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995).

3. Chronic WET Permit Limit

   All State waters shall be free from chronic toxicity as measured using the toxicity tests listed in HAR Section 11-54-10, or other methods specified by the Director. For this discharge, the determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the applicable IWC using the Test of Significant Toxicity (TST) approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010). For any one chronic toxicity test, the chronic WET permit limit that must be met is rejection of the null hypothesis (Ho):

IWC (percent effluent) mean response ≤ 0.75 × Control mean response.

For Outfall Serial No. 001, an IWC of 0.901% shall be used.

A test result that rejects this null hypothesis is reported as "Pass" on the DMR form. A test result that does not reject this null hypothesis is reported as "Fail" on the DMR form. To calculate either "Pass" or "Fail", the permittee shall follow the instructions in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A. If a test result is reported as "Fail", then the permittee shall follow Part B.6. (Accelerated Toxicity Testing and TRE/TIE Process) of this permit.

4. Quality Assurance

   a. Quality assurance measures, instructions, and other recommendations and requirements are found in the chronic test methods manual previously referenced. Additional requirements are specified below.

   b. This discharge is subject to a determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the IWC (for statistical flowchart and procedures, see National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A, Figure A-1). During Step 6 of Appendix A, the Permittee shall use an alpha value of 0.05 for *T. gratilla*. The chronic IWC for Outfall Serial No. 001 is 0.901 percent effluent.

   c. Effluent dilution water and control water shall be receiving water or lab water, as described in the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used.

   d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

   e. All multi-concentration reference toxicant test results must be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in Method Guidance and Recommendations

for Whole Effluent Toxicity (WET) Testing (40 CFR 136) (EPA/821/B-00/004, 2000).

f. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the Permittee shall re-sample and re-test within 14 calendar days.

g. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the Director.

5. Initial Investigation TRE Work Plan

Within 90 calendar days of the permit effective date, the Permittee shall prepare and submit to the Director a copy of its Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan (1-2 pages) for review. This plan shall include steps the Permittee intends to follow if toxicity is measured above the chronic WET permit limit and shall include the following, at minimum:

a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the Facility.

c. An indication of who would conduct the Toxicity Identification Evaluation (TIE) if a TIE is necessary (i.e., an in-house expert or outside contractor).

d. A flow chart of the workplan steps.

6. Accelerated Toxicity Testing and TRE/TIE Process

a. If the chronic WET permit limitation is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the Permittee shall conduct one (1) additional toxicity test using the same species and test method. This toxicity test shall begin within 14 calendar days of receipt of a test result exceeding the chronic WET permit limit. If the additional toxicity test does not exceed the chronic WET permit limitation, then the Permittee may return to the regular testing frequency.

b. If the chronic WET permit limit is exceeded and the source of toxicity is not known, then the Permittee shall conduct six (6) additional toxicity tests using the same species and test method, approximately every two (2) weeks, over a 12-week period. This testing shall begin within 14 calendar days of receipt of a test result exceeding the chronic WET permit limit. If none of the additional toxicity tests exceed the chronic WET permit limit, then the Permittee may return to the regular testing frequency.

c. If one (1) of the additional toxicity tests (in paragraphs Parts B.6.a. or B.6.b.) exceeds the chronic WET permit limitation, then, within 14 calendar days of receipt of this test result, the Permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833/B-99/002, 1999) or EPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989). In conjunction, the Permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the Permittee to investigate, identify, and correct the causes of toxicity; actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

d. The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003, 1991); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996). Further, the Permittee may be required by the Director to initiate a TIE as part of a TRE.

e. Prior to conducting a TIE, the Permittee shall submit a TIE plan to the Director. The TIE plan, at a minimum shall:

   (1) Discuss previous TIE efforts and other available data useful in developing TIE procedures

   (2) Evaluate available operations and effluent data

(3) Identify and discuss site-specific considerations for the TIE effort

(4) Include a comprehensive quality control program

(5) Establish a monitoring program

(6) Identify test methods and statistical methods to be used for the TIE effort

(7) Identify the TIE procedures for the baseline toxicity tests and TIE manipulations

(8) Discuss additional potential analysis that might be helpful in evaluating the causative toxicant(s) or appropriate treatability, such as pollutant scans for toxic effluent

(9) Discuss the personnel and their qualifications for the team conducting the TIE results interpretation

(10) Include follow-up procedures for use if the TIE is inconclusive.

The Permittee shall incorporate all comments received from the Director within 14 calendar days of the TIE plan submittal. Within 14 calendar days of the TIE plan submittal, the Permittee shall commence with the TIE.

7. Reporting of Chronic Toxicity Monitoring Results

a. The Permittee shall report on the DMR for the month in which the toxicity test was conducted: “Pass” or “Fail” (based on the Welch’s t-test result), the calculated “percent mean response at IWC”, where:

percent mean response at IWC = ((Control mean response – IWC mean response) ÷ Control mean response)) × 100,

and to assist in evaluation of the test result, the standard deviations for the IWC mean response and the Control mean response.

b. The Permittee shall submit a full laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The laboratory report shall contain: the toxicity test results; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

c. The Permittee shall notify the Director in writing within 14 calendar days of becoming aware of an exceedance of the chronic WET permit limitation. This notification shall describe actions the Permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

8. Permit Reopener for Chronic Toxicity

In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include new effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to chronic toxicity.

## C. WATER QUALITY CRITERIA

1. Specific Water Quality Criteria for Recreational Waters

   a. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in all State recreational water:

      (1) These criteria are designed to protect the public from exposure to harmful levels of pathogens while participating in water-contact activities. The specific criteria for enterococcus shall be expressed in colony forming units (CFU) per one hundred milliliters or as a most probable number (MPN) per one hundred milliliters, as specified by the analytical method used.

      (2) Enterococcus content shall not exceed a geometric mean of 35 CFU per one hundred milliliters over any 30-day interval.

      (3) A Statistical Threshold Value (STV) of 130 CFU per one hundred milliliters shall be used for enterococcus. The STV shall not be exceeded by more than ten percent of samples taken within the same 30-day interval in which the geometric mean is calculated.

      (4) State waters in which enterococcus content does not exceed the standard shall not be lowered in quality.

      (5) Raw or inadequately treated sewage, sewage for which the degree of treatment is unknown, or other pollutants of public health significance, as determined by the Director, shall not be present in natural public swimming, bathing, or wading areas. Warning signs shall be posted where human sewage has been identified as temporarily contributing to the enterococcus count.

   b. Compliance with the water quality criteria listed in Part C.1, above, shall be measured at the effluent as described in Part A.1 of this permit. The STV of 130 CFU per one hundred milliliters specified in Part C.1.a.(3) shall be applied, with a dilution of 111:1, as a single sample maximum effluent limitation, where not more than 10% of the samples taken within the month shall exceed this value.

2. Basic Water Quality Criteria Applicable to All Waters:

   a. The discharge shall comply with applicable water quality standards for receiving waters adopted by the DOH under HAR Chapter 11-54, Water Quality Standards, effective November 15, 2014.

   b. The discharge shall not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife and allows recreational activities in and on the water.

   c. The discharge of treated wastewater through Outfall Serial Nos. 001 and 002 shall not cause the following water quality criteria to be violated:

      (1) All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, include:

         (a) Material that will settle to form objectionable sludge or bottom deposits;

         (b) Floating debris, oil, grease, scum, or other floating materials;

         (c) Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;

         (d) High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;

         (e) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and

         (f) Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands.

(2) To ensure compliance with Part C.2.c.(1)(d), all State waters are subject to monitoring and to the following standards for acute and chronic toxicity and the protection of human health:

(a) All State waters shall be free from pollutants in concentrations which exceed the acute standards listed in HAR 11-54-4(c)(3). All State waters shall also be free from acute toxicity as measured using the toxicity tests listed in HAR 11-54-10, or other methods specified by the Director.

(b) All State waters shall be free from pollutants in concentrations which on average during any 24-hour period exceed the chronic standards listed in HAR 11-54-4(c)(3). All State waters shall also be free from chronic toxicity as measured using the toxicity tests listed in HAR 11-54-10, or other methods specified by the Director.

(c) All State waters shall be free from pollutants in concentrations which, on average during any 30-day period, exceed the “fish consumption” standards for non-carcinogens in HAR 11-54-4(c)(3). All State waters shall also be free from pollutants in concentrations, which on average during any 12-month period, exceed the “fish consumption” standards for pollutants identified as carcinogens in HAR 11-54-4(c)(3).

## D. ZONE OF INITIAL DILUTION (ZID) LIMITATIONS AND ZONE OF MIXING (ZOM) LIMITATIONS

1. Design Criteria

   a. The ZID and ZOM shall be established for the assimilation of secondary treated wastewater at a dry weather design flow of 13.0 MGD.

   b. The ZID is a rectangular box, 950 feet long and 300 feet wide, centered along the longitudinal axis of the diffuser and based on the depth of the ocean outfall (150 feet) with a radial distance equal to the outfall depth.

   c. The ZOM is 2,980 feet (910 m) long by 2,460 feet (750 m) wide and is centered along the longitudinal axis of the outfall diffuser. The start of the diffuser is located at Latitude 21°17′42.68753"N and Longitude 157°57′9.71793"W. The diffuser ends at Latitude 21°17′40.16908"N and Longitude 157°57′4.21209"W.

2. Zone of Initial Dilution (ZID)

   The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in Class A wet open coastal waters beyond the ZID:

| Parameter | Units | Geometric mean not to exceed the given value[1] | Not to exceed the given value more than 10% of the time[2] | Not to exceed the given value more than 2% of the time[2] |
|---|---|---|---|---|
| Total Nitrogen | µg/L | 150.00 | 250.00 | 350.00 |
| Ammonia Nitrogen | µg/L | 3.50 | 8.50 | 15.00 |
| Total Phosphorus | µg/L | 20.00 | 40.00 | 60.00 |
| Chlorophyll a | µg/L | 0.30 | 0.90 | 1.75 |
| Turbidity | NTU | 0.50 | 1.25 | 2.00 |
| pH | standard units | Shall not deviate more than 0.5 units from a value of 8.1, except coastal locations where and when freshwater from stream, storm drain, or groundwater discharge may depress the pH to a minimum level of 7.0. | | |
| Temperature | °C | Shall not vary more than one degree Celsius from ambient conditions. | | |
| Dissolved Oxygen | % Saturation | Not less than 75 percent saturation. | | |
| Salinity | ppt | Shall not vary more than 10 percent from natural or seasonal changes considering hydrologic input and oceanographic factors. | | |

[1] To be evaluated on an annual basis. Calculated per monitoring station using results from all depths.

[2] To be evaluated on an annual basis.

Monitoring for receiving water parameters shall be conducted as specified in Part E. of this Permit. The specific water quality criteria set forth in the table above may be exceeded within the boundaries of the ZID and shall not constitute a violation of this permit. Compliance with the geometric mean shall be evaluated based on a calendar year.

3. Zone of Mixing (ZOM)

The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in Class A wet open coastal waters beyond the ZOM:

| Parameter | Units | Geometric mean not to exceed the given value[1] | Not to exceed the given value more than 10% of the time[2] | Not to exceed the given value more than 2% of the time[2] |
|---|---|---|---|---|
| Nitrate + Nitrite Nitrogen | µg/L | 5.00 | 14.00 | 25.00 |

[1] To be evaluated on an annual basis. Calculated per monitoring station using results from all depths.
[2] To be evaluated on an annual basis.

Monitoring for receiving water parameters shall be conducted as specified in Part E. of this Permit. The specific water quality criteria set forth in the table above may be exceeded within the boundaries of the ZOM and shall not constitute a violation of this permit. Compliance with the geometric mean shall be evaluated based on a calendar year.

## E. RECEIVING WATER MONITORING PROGRAM REQUIREMENTS

The Permittee shall conduct receiving water monitoring at offshore stations, as described below. Results may be used to evaluate compliance with water quality standards specified in Part D. of this permit.

### 1. Offshore Water Quality Monitoring

Offshore water quality monitoring data are used to determine compliance with State water quality standards. Offshore stations shall be located using a global positioning device that allows reoccupation of the station within ±6 meters.

At a minimum, the Permittee shall monitor at four (4) sampling stations along the boundaries of the ZID, four (4) sampling stations along the boundaries of the ZOM and at two (2) control stations:

| Station | Latitude | Longitude |
|---|---|---|
| W1 (ZID) | 21°17'42.00362"N | 157°57'11.83917"W |
| W2 (ZID) | 21°17'44.67550"N | 157°57'10.44769"W |
| W3 (ZID) | 21°17'40.85296"N | 157°57'02.09085"W |
| W4 (ZID) | 21°17'38.18110"N | 157°57'03.48236"W |
| W5 (ZOM) | 21°17'36.79673"N | 157°57'26.49423"W |
| W6 (ZOM) | 21°17'58.70632"N | 157°57'15.08435"W |
| W7 (ZOM) | 21°17'46.05926"N | 157°56'47.43544"W |
| W8 (ZOM) | 21°17'24.15018"N | 157°56'58.84618"W |
| W9 (Control Station) | [1] | [1] |
| W10 (Control Station) | [1] | [1] |

[1]The coordinates for each offshore water quality monitoring station shall be identified in the Monitoring Plan in accordance with Part I.1. of this permit.

a. The following water quality parameters shall be sampled at the ZID and control stations:

| Parameter | Units | Sample Type | Monitoring Frequency |
|---|---|---|---|
| Total Nitrogen | µg/L | Grab[1] | Twice/Year[3,4] |
| Ammonia Nitrogen | µg/L | Grab[1] | Twice/Year[3,4] |
| Total Phosphorus | µg/L | Grab[1] | Twice/Year[3,4] |
| Chlorophyll a | µg/L | Grab[1] | Twice/Year[3,4] |
| Turbidity | NTU | Grab[1] | Twice/Year[3,4] |
| pH | s.u. | CDP[2] | Twice/Year[3,4] |
| Dissolved Oxygen | mg/L | CDP[2] | Twice/Year[3,4] |
| Temperature | °C | CDP[2] | Twice/Year[3,4] |
| Salinity | ppt | CDP[2] | Twice/Year[3,4] |

[1] Grab samples shall be collected at each station at 1 meter below the surface, mid-depth, and 2 meters above the bottom.

[2] A continuous depth profile (CDP) is a plot of depth vs. a water quality parameter. Parameter shall be measured on a CDP basis, from within 1 meter below the surface to within 2 meters above the bottom at 2-meter intervals.

[3] The Permittee shall conduct ZID monitoring on the same day that the effluent sampling is conducted.

[4] If the Permittee does not violate the receiving water limitation after completing two (2) consecutive years of testing, the Permittee may request a reduction in monitoring frequency to once per year for the remainder of the permit term. Any reduction in monitoring frequency must be approved by the Director of Health in writing and shall be at the Director of Health's sole discretion. Factors which may be considered include both the Facility's compliance and enforcement history, as well as the amount and type of data. If the Permittee violates the receiving water limitation after a reduction in monitoring frequency becomes in effect, the monitoring frequency shall return to twice per year for the duration of the permit. The Department may revoke the approval at any time upon notification of the Permittee.

b. The following water quality parameters shall be sampled at the ZOM and control stations:

| Parameter | Units | Sample Type | Monitoring Frequency |
|---|---|---|---|
| Nitrate + Nitrite Nitrogen | µg/L | Grab[1] | Twice/Year[2,3] |

[1] Grab samples shall be collected at each station at 1 meter below the surface, mid-depth, and 2 meters above the bottom.

[2] The Permittee shall conduct ZOM monitoring on the same day that the effluent sampling is conducted.

[3] If the Permittee does not violate the receiving water limitation after completing two (2) consecutive years of testing, the Permittee may request a reduction in monitoring frequency to once per year for the remainder of the permit term. Any reduction in monitoring frequency must be approved by the Director of Health in writing and shall be at the Director of Health's sole discretion. Factors which may be considered include both the Facility's compliance and enforcement history, as well as the amount and type of data. If the Permittee violates the receiving water limitation after a reduction in monitoring frequency becomes in effect, the monitoring frequency shall return to twice per year for the duration of the permit. The Department may revoke the approval at any time upon notification of the Permittee.

Inability to conduct offshore monitoring due to inclement weather or hazardous conditions which may endanger the lives of the Facility's personnel shall not constitute a violation of this permit.

Upon request by the Permittee and written approval by the Director, or upon request by the Director, the Permittee shall revise their receiving water monitoring plan to replace and/or include additional monitoring locations to show better representation of the surrounding waters and/or to augment regional monitoring efforts by the DOH.

Monitoring results shall be reported in monthly DMRs. The DMRs submitted shall include monitoring results and probable sources and an explanation of any exceedances. The results shall be submitted in a format which allows direct comparison with the limitations in Part D.

**2. Receiving Water Monitoring Plan**

As part of the Receiving Water Monitoring Program, the Permittee shall develop and implement a Receiving Water Monitoring Plan that demonstrates that the State Water Quality Standards are met at the boundaries of the ZID and ZOM. The Monitoring Plan shall include a sampling map that shows the boundaries and dimensions (length, width, and height) of the ZOM, boundaries and dimensions (length, width, and height) of the ZID, and the sampling locations, including the control points. This Monitoring Plan shall be submitted to the DOH-CWB as specified in Part I.1. of this permit.

**3. Regional Monitoring**

As directed by the DOH, the Permittee shall participate in regional monitoring activities conducted in the Mamala Bay during the term of this permit. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a cost-effective monitoring design and to best utilize the pooled scientific resources of the region. The detailed plan for regional monitoring in Mamala Bay shall be designed by the regional dischargers, in conjunction with the EPA, Department, City and County of Honolulu, and as much as possible, other participating government agencies and private entities. The final monitoring plan must be approved by the DOH prior to its implementation.

During these coordinated monitoring efforts, the Permittee's receiving water sampling and analytical effort as required under this permit, may be reallocated or modified to provide a regional assessment of the impact of the discharge. Anticipated modifications to the monitoring program will be coordinated to provide a comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollutant sources.

This permit may be modified pursuant to 40 CFR 122.62 to incorporate changes to the monitoring requirements once a regional monitoring program plan has been developed.

## 4. Ocean Outfall Monitoring

At least once during the term of this permit, the Permittee shall inspect the ocean outfall and submit the investigation findings to the Director. The outfall inspection shall include, but not be limited to, an investigation of the structural integrity, operational status, and maintenance needs. The Permittee shall include findings of the inspection to the Director in the annual wastewater pollution prevention report in Part F. of this permit for the year the outfall inspection is conducted.

## 5. ZOM Dilution Analysis Study

a. Within four (4) years of the effective date of this permit, the Permittee shall conduct and submit to DOH a dilution analysis study which identifies the average dilution at the edge of the ZOM (Stations 5 through 8). In addition, the ZOM dilution analysis study shall verify the presence or absence of assimilative capacity for nitrate + nitrite nitrogen based on receiving water data at and beyond the edge of the ZOM.

   (1) The dilution analysis study shall comply with the contents of Attachment 2: Dilution Model Guidance.

   (2) Within two (2) years of the effective date of this permit, the Permittee shall provide an update to DOH on the status of the dilution analysis and provide any preliminary data and results available at that time.

   (3) Within four (4) years of the effective date of this permit, the Permittee shall submit a final report to DOH which; summarizes the method and results of the ZOM Dilution Analysis Study, identifies and supports an annual average dilution at the edge of the ZOM, verifies the presence or absence of assimilative capacity for nitrate + nitrite nitrogen, and includes all model inputs and outputs.

b. In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include new effluent limitations or permit conditions based on information provided from the ZOM Dilution Analysis Study; or to implement new, revised, or newly interpreted water quality standards applicable to HAR Chapter 11-54-6, water quality standards.

## 6. Annual Receiving Water Monitoring Programs

The Permittee shall submit an annual receiving water monitoring report by March 31$^{st}$ of each year. The annual receiving water monitoring reports shall

summarize and discuss monitoring results for the previous year. Reports shall include, at minimum:

a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).

b. A description of sampling stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediment, rocks, and shell litter, calcareous worm tubes, etc.). In addition, the Permittee shall include the distance from shore for each nearshore sampling station.

c. A record shall be kept of the individual(s) performing sampling or measurements. A description of the sample collection and preservation procedures used in the survey shall be included in the report.

d. A description of methods used for laboratory analyses. Variations in procedure may be acceptable, but any such changes shall be reported to the DOH, before implementation. All such variations must be reported with the analytical results.

e. An in-depth discussion of monitoring results. All tabulations and computations shall be explained.

## F. WASTEWATER POLLUTION PREVENTION PROGRAM

1. Annual Report

   The Permittee shall submit an annual report summarizing critical parameters which impact the operations of the Facility to the DOH by April 30th of each year, unless otherwise instructed by the DOH. The report shall include, at a minimum, an evaluation of critical parameters, including the following:

   a. Flow;

   b. $BOD_5$ loading;

   c. TSS loading;

   d. Toxic pollutants or impacts of septic wastes;

   e. Growth potential of the service area;

   f. Impact of new regulations;

   g. Bypasses and overflows;

   h. Effectiveness and condition of the collection system; and,

   i. Treatment capacity based on additional information.

2. Flow Rate Notification

   The Permittee shall notify the Director and the EPA in writing not later than 90 calendar days after the 30-day average dry weather discharge flow rate equals or exceeds 75% of the actual treatment capacity of the Facility as reported above in Part F.1.i. The report shall include:

   a. Date on which the 30-day average discharge flow rate equals or exceeds 75% of the actual treatment capacity of the Facility.

   b. Estimate of when the 30-day average discharge flow rate will equal or exceed the actual treatment capacity of the Facility.

   c. Schedule of compliance to provide additional treatment capacity before the 30-day average discharge flow rate equals the actual treatment capacity of the Facility.

3. Implementation of the Schedule of Compliance for Flow Rate Notification

   a. The Permittee shall comply with the provisions of the schedule of compliance after approval by the Director.

   b. The Permittee shall initiate contingency plans to provide additional treatment capacity not later than 90 calendar days following the date on which the 30-day average discharge flow rate equals or exceeds 85% of the actual treatment capacity of the Facility as reported in Part F.1.i.

   c. The Director may grant a special exemption to eliminate the requirement for a contingency plan. The Permittee shall request such exemption in writing and may include the request in the annual report. The Director shall notify the Permittee in writing of his decision.

## G. NON-DOMESTIC WASTEWATER CONTROL REQUIREMENTS FOR BEST AVAILABLE TECHNOLOGY ECONOMICALLY FEASIBLE (BAT)

1. Industrial Wastewater Sewer Discharge Permit System Program

   The Permittee shall implement its Industrial Wastewater Sewer Discharge Permit System and related management program to control the discharge of non-domestic wastewaters to its sanitary sewer system and Facility to maintain BAT at the entire facility, including discharges originating throughout JBPHH, Camp Smith, and any other areas served by the Facility. This program shall specifically be implemented to ensure that wastewater treatment plant removal efficiencies for pollutants are not reduced and violations of applicable water quality-based requirements to not occur, and to adequately prevent:

   a. Excessive heat, BOD and oils that result in violations of the Facility's effluent discharge limitations contained in Part A.1.a. of this permit;

   b. Sludge contamination that interferes with the disposal of sludge in accordance with 40 CFR 503 and as specified in Part H. of this permit;

   c. The discharge of pollutants that exceed the ZID and ZOM limitations contained in Part D. of this permit;

   d. The introduction of pollutants which create a fire or explosion hazard in the sewers and Facility, including waste streams with a closed cup flashpoint of less than 140°F using the test methods specified in 40 CFR 261.21; and

   e. The introduction of pollutants which will cause corrosive structural damage, obstructions in flow, or the formation of toxic gases and fumes in a quantity that could cause acute worker health and safety problems.

2. Minimum Program Components

   a. Prohibitions – The Permittee shall prohibit the introduction from any person or facility, the following to the Facility or sewer system to maintain BAT at the entire facility:

      (1) Hazardous waste.

      (2) Pollutants which create a fire or explosion hazard in the Facility, including waste streams with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21.

(3) Pollutants which will cause corrosive or structural damage to the Facility. In no case shall discharges to the Facility or sewer system have a pH less than 5.0 standard units.

(4) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the sewer system or Facility resulting in interference.

(5) Any pollutant, including heat and oxygen demanding pollutants (BOD, etc.) at a flow rate and/or pollutant concentration which will inhibit or disrupt the Facility, its processes or operations, or its sludge processes, use or disposal.

(6) Discharges of petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

(7) Discharges that result in the presence of toxic gases, vapors, or fumes within the Facility in a quantity that may cause acute worker health and safety problems.

(8) Discharges of trucked or hauled pollutants, except at discharge points designated by the Facility.

(9) Pollutants in concentrations exceeding the limitations in COMNAVREG HAWAII INSTRUCTION 11345.2D WASTEWATER DISCHARGE LIMITATIONS.

b. Industrial Wastewater Discharge Certificates

(1) Applicability

No person or facility may discharge non-domestic wastes to the sanitary sewer system or treatment plant without first obtaining an Industrial Wastewater Discharge Certificate from the Naval Facilities Engineering Command, Hawaii (NAVFAC HI). The NAVFAC HI shall not issue an Industrial Wastewater Discharge Certificate without first conducting an on-site inspection of the facility proposing to discharge. The NAVFAC HI shall review plans for all proposed new facilities which will discharge to the sanitary sewer to ensure that they will comply with all applicable discharge prohibitions, limitations and monitoring requirements. No Industrial Wastewater Discharge Certificate may be issued to a facility which does not have all pollution control devices which are necessary to achieve compliance with all applicable

discharge prohibitions, limitations, and monitoring requirements. No Industrial Wastewater Discharge Certificate may be issued if the facility's pollution control devices or management practices are not adequately designed, constructed, operated, or maintained to achieve compliance with all applicable discharge prohibitions, limitations, and monitoring requirements. Industrial Wastewater Discharge Certificates shall be issued only for discharges to the sanitary sewer system. No facility shall discharge directly to waters of the U. S., or to any ditch, storm sewer or other discrete conveyance that is tributary to a water of the U.S., unless authorized under this permit or a separate NPDES permit.

(2) Limitations and Monitoring Requirements

Industrial Wastewater Discharge Certificates shall specify pollutant limitations and monitoring requirements necessary to ensure compliance with all applicable discharge prohibitions specified in Part G.2.a. above.

c. Wastewater Discharge Limitations

The Permittee shall evaluate the COMNAVREG HAWAII INSTRUCTION 11345.2D WASTEWATER DISCHARGE LIMITATIONS to determine whether they are sufficient to control non-domestic wastewater discharges to maintain BAT at the entire Facility. Specifically, this program must be sufficient to ensure that wastewater treatment plant removal efficiencies for pollutants are not reduced and violations of applicable water quality-based requirements to not occur, including the prevention of:

(1) Excessive heat, BOD and oils that result in violations of the Facility's effluent discharge limitations contained in Part A.1.a. of this permit;

(2) Sludge contamination that interferes with the disposal of sludge in accordance with 40 CFR 503 and as specified in Part H. of this permit;

(3) The discharge of pollutants that exceed the ZID and ZOM limitations contained in Part D. of this permit;

(4) The introduction of pollutants which create a fire or explosion hazard in the sewers and Facility, including waste streams with a closed cup flashpoint of less than 140°F using the test methods specified in 40 CFR 261.21; and

(5) The introduction of pollutants which will cause corrosive structural damage, obstructions in flow, or the formation of toxic gases and fumes in a quantity that could cause acute worker health and safety problems.

This evaluation shall be completed six (6) months after the effective date of the permit renewal and submitted to the Director and EPA. If the results of the evaluation indicate the need to revise COMNAVREG HAWAII INSTRUCTION 11345.2D WASTEWATER DISCHARGE LIMITATIONS, then these revisions must be made, and all applicable Industrial Wastewater Discharge Certificates must be revised, within two (2) years after the effective date of the permit renewal.

d. Inspections

All facilities regulated by an Industrial Wastewater Discharge Certificate shall be inspected by NAVFAC HI not less than once per year. A written record shall be kept of each inspection noting compliance or noncompliance with discharge limitations, operation and maintenance, and any changes in pollutants discharged or disposal practices.

3. Annual Report

The Permittee shall submit annually to the Director a report describing its non-domestic discharger control activities over the previous year. In the event that the Permittee is not in compliance with any conditions or requirements of this permit, then the Permittee shall also include the reasons for noncompliance and state how and when the Permittee shall comply with such conditions and requirements. This annual report shall cover operations from January 1st through December 31st and is due on March 31st of the following year. The report shall contain, but not be limited to, the following information:

a. A list of all non-domestic facilities and processes authorized by Industrial Wastewater Discharge Certificates to discharge to the sewer system.

b. A list of all non-domestic facilities which obtained Industrial Wastewater Discharge Certificates during the previous 12 months.

c. The results of all inspections and monitoring of non-domestic facilities and processes performed during the previous 12 months.

d. A discussion of upset, reductions in removal efficiencies, or violations of applicable water quality-based requirements, if any, at the Facility which

the Permittee knows or suspects were caused by non-domestic users of the collection system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the non-domestic facility(ies) responsible. The discussion shall also include a review of the applicable Industrial Wastewater Discharge Certificates to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent upset, reductions in removal efficiencies, or violations of applicable water quality-based requirements.

e. The Permittee shall list all facilities found to be in violation of applicable Industrial Wastewater Discharge Certificate requirements and/or applicable discharge prohibitions specified in Part G.2.a. above.

f. A list of all Industrial Wastewater Discharge Certificates revoked during the previous year.

g. A brief description of any significant changes in the non-domestic control program which differ from the previous year, including any changes in the wastewater discharge limitations contained in COMNAVREG HAWAII INSTRUCTION 11345.2D WASTEWATER DISCHARGE LIMITATIONS.

h. Formal enforcement procedures for all JBPHH non-domestic facilities and processes authorized by the Industrial Wastewater Discharge Certificates to discharge to the Facility’s sewer system.

## H. SLUDGE/BIOSOLIDS REQUIREMENTS

1. Sludge Use/Disposal Requirements

   a. General Conditions and Requirements

      (1) Acceptable Sludge Use/Disposal Practices

         (a) The Permittee shall dispose of all sludge generated at the facility at a municipal solid waste landfill, at a sludge surface disposal site, by land application, or by transferring the sludge to another party for further treatment, use, or disposal in accordance with all applicable portions of 40 CFR Parts 257, 258, 503, and HAR Chapters 11-58.1 and 11-62.

         (b) Storage of sludge for over two years from the time it is generated shall be considered to be surface disposal. The storage site shall meet all the requirements of a surface disposal site under 40 CFR 503 Subpart C and HAR Chapters 11-58.1 and 11-62. If the Permittee desires to store sludge for longer periods of time prior to final disposal, the Permittee shall submit a written request to the EPA Regional Sludge Coordinator and Director containing the information required under 40 CFR Section 503.20(b).

         (c) The Permittee shall dispose of sludge containing more than 50 mg/kg of PCBs in accordance with 40 CFR 761.

         (d) If the Permittee desires to dispose of sludge using a method not listed above, the Permittee shall submit a request for permit modification to EPA Regional Sludge Coordinator and Director 180 calendar days prior to the commencement of the alternate disposal practice.

      (2) Duty to Mitigate

         (a) The Permittee shall be responsible for ensuring the following:

            (i) All sludge produced at its facility is used/disposed of in accordance with 40 CFR Parts 257, 258, 503, and HAR Chapters 11-58.1 and 11-62, whether the Permittee uses/disposes of the sludge itself or transfers it to another party for further treatment, use, or disposal.

(ii) Subsequent preparers, appliers, or disposers of the sludge are informed of the requirements under 40 CFR Parts 257, 258, 503, and HAR Chapters 11-58.1 and 11-62.

(iii) Sludge is not allowed to enter State waters, or to contaminate an underground drinking water source.

(iv) Sludge treatment, storage, use, and disposal do not create a public nuisance.

(v) Haulers who ship non-Class A sludge off-site for additional treatment, use, or disposal take all necessary measures to keep sludge contained.

(b) The Permittee shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

(3) Other Conditions

(a) The Director may promptly modify or revoke and reissue this permit to incorporate any applicable standard for sewage sludge use or disposal promulgated under the Act Section 405(d), or adopted under HRS Chapter 342D, or HAR Chapter 11-62, if the standard is more stringent than the standard in this permit or covers a pollutant or practice not covered in this permit.

(b) The sludge requirements in this part are supplemental to the other conditions of this permit. In the event of a conflict, those requirements more protective of the environment shall apply.

(c) The requirements in 40 CFR 503 are enforceable by the EPA independently of being included in this permit.

b. Sludge Limitations and Monitoring Requirements

(1) Sludge shall be limited and monitored by the Permittee as specified below:

(a) Sludge Disposed of in Municipal Solid Waste Landfills

| Monitoring Parameter/Test Procedures | Limitation | Monitoring Frequency |
|---|---|---|
| Paint Filter Test (EPA Method 9095B) | No "Free Liquids"[1] | 1/Year |
| Toxicity Characteristic Leaching Procedure (TCLP) Test[2] | [2] | 1/Year |
| Priority Pollutants[3] | N/A | 1/Year[4] |

N/A = Not Applicable

1 "Free Liquids" as defined in EPA Method 9095.

2 The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

3 Priority pollutants are listed under the Act Section 307(a).

4 The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

(b) Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

| Parameter | Limitation (Mg/kg) | | | | | | | Monitoring Frequency |
|---|---|---|---|---|---|---|---|---|
| | 0<25 m | 25<50 m | 50<75 m | 75<100 m | 100<125 m | 125<150 m | >150 m | |
| Arsenic[1] | 30 | 34 | 39 | 46 | 53 | 62 | 73 | [2] |
| Chromium[1] | 200 | 220 | 260 | 300 | 360 | 450 | 600 | [2] |
| Nickel[1] | 210 | 240 | 270 | 320 | 390 | 420 | 420 | [2] |
| TCLP Test[3] | [3] | | | | | | | 1/Year |
| Priority Pollutants[4] | N/A | | | | | | | 1/Year[5] |

m = Meter

N/A = Not Applicable

1 The Permittee shall monitor for this parameter only if sludge is disposed of in a unit with no liner and leachate system. Limitations are based on the distance (meters) from the active sludge unit boundary to the nearest property line.

2 Monitoring frequency shall be determined by the following table:

| Annual Production, Dry Weight (Metric Tons/Year) | Monitoring Frequency |
|---|---|
| 0 - 290 | 1/Year (November) |
| 290 – 1,500 | 1/Quarter (Feb/May/Aug/Dec) |
| 1,500 – 15,000 | 6/Year (Feb/Apr/Jun/Aug/Oct/Dec) |
| >15,000 | 1/Month |

[3] The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

[4] Priority pollutants are listed under the CWA Section 307(a).

[5] The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

(c) Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.

(2) The Permittee shall develop a representative sampling plan for monitoring toxics reduction, including the number and location of sampling points.

(a) If sludge generated at the facility is land applied or disposed at a surface disposal site, the sampling plan shall also include pathogens and vector attraction reduction monitoring.

(b) If pathogen reduction is determined by time and temperature, the plan shall be designed to determine temperatures throughout the batch being treated.

(c) If windrow composting is used, temperature shall be measured at least once for each 150 feet of windrow, and include measurements at depths of 12 to 24 inches below the surface.

c. Requirements for Sludge Disposed of in Municipal Solid Waste Landfill

(1) The Permittee shall dispose sludge in municipal solid waste landfills that meet the requirements of 40 CFR 258; and HAR Chapter 11-58.1.

(2) Sludge shall not contain “free liquids” as defined by EPA Method 9095B (Paint Filter Liquids Test).

d. Requirements for Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

(1) Sludge that is disposed of in a sludge-only landfill shall meet the general requirements, pollutant limits (for surface disposal sites without liners and leachate systems), management practices, and operational standards in 40 CFR 503 Subpart C and additional pollutant limits requested by the Director.

(2) The Permittee shall have a qualified groundwater scientist develop a groundwater monitoring program for the surface disposal site or certify that the placement of sludge on the site will not cause aquifer contamination.

e. Requirements for Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.

f. Notification Requirements

(1) If sludge other than exceptional quality sludge is shipped to another state or to Indian lands, the Permittee shall notify the permitting authorities in the receiving state or Indian land (the EPA Regional Office for that area and the State or Indian authorities) 60 calendar days prior to shipment.

(2) The Permittee shall notify the EPA Regional Sludge Coordinator and the Director of any non-compliance that may seriously endanger public health or the environment within 24 hours after becoming aware of the non-compliance. A written non-compliance report shall be submitted, postmarked, or faxed within five working days after the Permittee becomes aware of the noncompliance.

(3) The Permittee shall report all other instances of non-compliance not reported under Part H.1.f.(2) at the time discharge monitoring reports are submitted as required by Part I.2. of this permit.

g. Annual Report

By February 19th of each year, the Permittee shall submit an annual report on sludge management activities during the previous calendar year to the EPA Regional Sludge Coordinator and the Director. The report shall provide the following information:

(1) Total amount of sludge generated that year and a breakdown of the usage/disposal methods employed (in dry weight, metric tons).

(2) Results of all monitoring required by Part H.1.b.

(3) If sludge was disposed in a municipal solid waste landfill, then the Permittee shall include the following certification statement:

**"I certify under the penalty of law, that the paint filter test and toxicity characteristic leaching procedure test requirements have been met, and that vector attraction reduction requirements have been met by the municipal solid waste landfill. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the necessary requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."**

(4) If sludge was disposed in a surface disposal site, the following information shall be included:

(a) Requirements specified in 40 CFR 503.27.

(b) Name and mailing address of surface disposal operator if different from Permittee.

(c) Location (street address and latitude and longitude) of surface disposal site.

(d) Results of groundwater monitoring, or a copy of a certification by a groundwater scientist (including the scientist's name, title, and phone number) that the placement of sludge at the surface disposal site will not cause aquifer contamination.

(5) If sludge was land-applied, the following information shall be included:

(a) Requirements specified in 40 CFR 503.17(a) for all facilities preparing sludge for land application or reference to that facility's report, if submitted to EPA separately.

(b) Names and addresses of all facilities receiving the non-exceptional quality sludge, including land appliers and those facilities providing further treatment/blending prior to land application.

(c) Location of land application sites of non-exceptional quality sludge (street address, latitude and longitude) and sizes of parcels.

(d) Crops grown, agronomic rate for the crops grown, and certification by the land appliers of non-exceptional quality sludge that the sludge was applied at a rate not exceeding the agronomic rate determined for each crop.

(e) Copies of other certification statements by land appliers of non-exceptional quality sludge.

(6) If sludge was stored, the following information shall also be included:

(a) Age of stored sludge.

(b) Name and mailing address of operator of storage site if different from Permittee.

(c) Location of stored sludge (street address, latitude and longitude).

(7) If sludge was disposed using other methods, descriptions of the methods employed and the locations (street address, latitude and longitude) of the usage/disposal sites shall be included.

(8) Annual reports shall be submitted to DOH through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instruction to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting

submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.

Annual reports shall be submitted to EPA using EPA's NPDES Electronic Reporting Tool ("NeT") for biosolids, which goes into effect December 21, 2016, unless otherwise specified by the DOH.

(9) A copy of the Annual report shall be submitted to DOH at the following addresses:

Wastewater Sludge Program Manager
Wastewater Branch
Environmental Management Division
Department of Health
2827 Waimano Home Road
Hale Ola Building, Room 207
Pearl City, Hawaii 96782

## I. REPORTING REQUIREMENTS

1. Schedule of Submission

   a. Effluent, Influent, and Receiving Water Monitoring Programs

      (1) Effluent and Influent Monitoring Program

      Within 30 calendar days after the effective date of this permit, the Permittee shall submit an updated/revised Effluent and Influent Monitoring Program which complies with Part A. of this permit.

      (2) Receiving Water Monitoring Program

      Within 30 calendar days after the effective date of this permit, the Permittee shall submit an updated/revised Receiving Water Monitoring Program which complies with Part E. of this permit.

      (3) The Programs(s) shall include at a minimum, but not be limited to the following:

      (a) Sampling location map;
      (b) Sample holding time;
      (c) Preservation techniques;
      (d) Test method and method detection level; and
      (e) Quality control measures.

      The Permittee shall continue to implement the current plans until the revised programs are submitted to the Director. The revised programs should be implemented beginning the month they are submitted. The Permittee shall address all comment regarding the plans to the Director's satisfaction.

      The DOH reserves the right to require the Permittee to revise the program, as appropriate, pursuant toward compliance with the terms and conditions of this permit.

      Monitoring shall be conducted in accordance with test procedures approved under 40 CFR 136 with detection limits low enough to measure the compliance with Part A. of this permit. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the compliance shall be based upon the lowest detection limit possible for the given sample and method.

If a test method has not been promulgated for a particular constituent, the Permittee may use any suitable method for measuring the level of the constituent in the discharge provided the Permittee submit a description of the method or a reference to a published method.

b. Storm Water Pollution Control Plan (SWPCP)

Within 60 calendar days after the effective date of this permit, the Permittee shall submit an updated SWPCP in accordance with Part A.4.g. to the Director.

2. Transmittal and Monitoring Results Reporting Requirements

a. Certification of Transmittals

Submit all information in accordance with HAR Section 11-55-07(b), with the following certification statement by an appropriate signatory:

**"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."**

b. Include **Permit No. HI 0110086** on each transmittal.

Failure to provide the assigned permit number for this facility on future correspondence or transmittals may be a basis for delay of the processing of the document(s).

c. Reporting of Discharge and Monitoring Results

(1) All wastewater monitoring, and biosolids/sludge monitoring, sample preservation, and analyses shall be performed as described in the most recent edition of 40 CFR 136, unless otherwise specified in this permit. All receiving water monitoring, sample preservation, and analyses shall be performed as specified in this permit.

(2) In accordance with 40 CFR 122.45(c), effluent analyses for metals shall be reported as total recoverable.

(3) Monitoring results shall be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1) if the monitoring results are not able to be reported through NetDMR. The results of all monitoring required by this permit shall be submitted in a format which allows direct comparison with the limitations in Part A. and other requirements of this permit.

(4) For the purposes of reporting, the Permittee shall use the reporting threshold equivalent to the laboratory's method detection limit (MDL). As such, the Permittee must conduct influent and effluent analyses in accordance with the method specified Appendix 1 of this permit and must utilize a standard calibration where the lowest standard point is equal to or less than the concentration of the minimum level (ML).

(a) The MDL is defined as the minimum concentration of an analyte that can be detected with 99% confidence.

(b) The ML is defined as the concentration in a sample equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed. Where a promulgated ML is not available, an interim ML is calculated using a factor of 3.18 times the MDL.

Analytical results at or above the laboratory's ML shall be reported on DMRs as the measured concentration. For analytical results between the MDL and the ML, the Permittee shall report in the comment section on the DMR the sigma (σ) value (determined by the laboratory during the MDL study). Analytical results below the laboratory's MDL shall be reported as less than the MDL (i.e., "< 10").

(5) Should there be no discharges during the monitoring period, the DMR form shall so state

d. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant at location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR 136, the results of such monitoring shall be

included in the calculation and reporting of the values required in the DMR form. The increased frequency shall also be indicated.

e. Submittal of Monitoring Results Using NetDMR

The Permittee shall submit DMRs required under this permit electronically using NetDMR. NetDMR is accessed from: http://www.epa.gov/netdmr.

DMRs shall be submitted electronically no later than the 28th day of the month following the completed reporting period. Once a Permittee begins submitting DMRs using NetDMR, it will no longer be required to submit hard copies of DMRs to the Director, unless otherwise requested by the Director.

f. Schedule of Submission

(1) The Permittee shall submit reports to the Director as specified below.

| Report | Reporting Period | Report Due Date |
|---|---|---|
| Discharge Monitoring Report | 1/Month | 28th day of the month following completed reporting period |
| Sludge/Biosolids Annual Report | 1/Year | February 19 of each year |
| Source Control Annual Report | 1/Year | March 31 of each year |
| Annual Receiving Water Monitoring Report | 1/Year | March 31 of each year |
| Wastewater Pollution Prevention Program Annual Report | 1/Year | April 30 of each year |
| Updated SWPCP | 1/Permit Term | 60 days after permit effective date |
| Initial Investigation TRE Workplan | 1/Permit Term | 90 days after permit effective date |
| ZOM Dilution Analysis Study Report | 1/Permit Term | 4 years after permit effective date |
| Evaluation/Update of COMNAVREG HAWAII INSTRUCTION 11345.2D Wastewater Discharge Limitations | 1/Permit Term | 6 months after the permit effective date |

Signed copies of monitoring and all other reports required by this permit, except those described in Part I.2.e. of this permit, shall be submitted to the Director through the CWB Compliance Submittal Form

for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit.

You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instruction to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date. The submission date shall be the date the signed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form and CD/DVD is received by DOH.

Duplicate copies of the sludge reports shall be submitted to the Regional Administrator as specified in Part H. of this permit.

(2) The Permittee shall submit reports to the Director as specified below.

| Report | Reporting Period | Report Due Date |
|---|---|---|
| Offshore Water Quality Monitoring | Twice/Year | 28th day of the month following completed reporting period |

Signed copies of monitoring and all other reports required by this permit, except those described in Part I.2.e. of this permit, shall be submitted to the Director through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit.

3. Reporting of Noncompliance, Unanticipated Bypass, or Upset

The following requirements replace the 24-hour notice requirements for bypasses (Standard NPDES Conditions Section 17(d)(2)(B) and 40 CFR Section 122.41(1)(6)(ii)(A)) and upsets (Standard NPDES Conditions Section 18(c)(3) and 40 CFR Section 122.41(1)(6)(ii)(B)).

a. Immediate Reporting

(1) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge to State waters, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

(2) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge of 1,000 gallons or more to State waters, the Permittee shall orally notify the DOH and the Associated Press news wire services at the time the Permittee's authorized personnel becomes aware of the circumstances, but no later than 24 hours after the event.

(3) In the event of an exceedance of a daily maximum discharge limitation, if any exist, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel becomes aware of the circumstances, but no later than 24 hours after the event.

b. Contact for Oral Reports

(1) The Permittee shall make oral reports during regular office hours (7:45 a.m. to 4:30 p.m.) to the DOH, Clean Water Branch (CWB) at 586-4309.

(2) The Permittee shall make oral reports outside of regular office hours to the State Hospital Operator at 247-2191.

c. Written Submission

(1) For those non-compliances requiring immediate reporting, the Permittee shall submit a written non-compliance report. The Permittee shall submit the report to the DOH, CWB, in accordance with Part I.2.f.(1) within five (5) working days after the Permittee's authorized personnel becomes aware of the noncompliance.

(2) The report shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times; if the non-compliance has not been corrected, the anticipated time it is expected to continue; public notice efforts, if any; clean-up efforts, if any; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the non-compliance.

(3) The Director may waive the written report or the five (5) working day deadline on a case-by-case basis for spills, bypasses, upsets, and violations of daily maximum discharge limitations if the oral report has been received within 24 hours of the non-compliance or when the Permittee's authorized personnel becomes aware of the non-compliance.

d. Other Non-Compliance

The Permittee shall report all other instances of non-compliance not reported under Part I.3.a. at the time DMRs are submitted as required by Part I.2. of this permit. The non-compliance reports shall contain the information requested in Part I.3.c.(2) of this permit.

4. Other Reporting Requirements

The Permittee shall comply with the reporting requirements of 40 CFR 122.41(l)(1) through 122.41(l)(5), and 122.41(l)(8) as incorporated by Standard NPDES Permit Conditions, Section 16. Parts I.2. and I.3. of this permit supersede the requirements of 40 CFR 122.41(l)(6) and 122.41(l)(7).

5. Types of Sample

a. "Grab sample" means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.

b. "Composite sample" means a combination of at least eight (8) sample aliquots, collected at periodic intervals during the operating hours of the facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

## J. SPECIAL CONDITIONS

1. Wastewater treatment facilities subject to this permit shall be supervised and operated by persons possessing certificates of appropriate grade, as determined by the DOH. If such personnel are not available to staff the wastewater treatment facilities, a program to promote such certification shall be developed and enacted by the Permittee. Activities of this program shall be reported in the Annual Report in Part F. of this permit.

2. The Permittee shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Permittee shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

3. This permit may be reopened and modified, in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information.

4. Response to Sewage Spill

    a. Discharges to Surface Waters or Only to the Ground Outside the Facility's Fence

        (1) Disinfection/Clean Up

            (a) Sewage that is discharged shall be disinfected prior to being discharged if sufficient disinfection contact time is available. Best judgment should be used in determining the amount of chlorine added to the discharge if chlorine is used as a disinfectant. The Permittee shall comply with the total residual chlorine discharge limitation as specified in HAR Chapter 11-55.

            (b) Wastewater spilled onto the ground shall be disinfected if the wastewater remains ponded on the ground for any sufficient length of time or if the discharge continues for any significant duration. Contaminated grounds shall be cleared of all debris and standing wastewater.

(2) Public Warnings

(a) The Permittee shall immediately post “Warning Signs” in the areas or near waters likely to be affected by the discharge and where public access is possible.

(b) The Director in care of the CWB shall also check whether the number and location of the posted “Warning Signs” are sufficient. Authorization to remove the signs will also come from the Director in care of the CWB. The Director in care of the CWB may require the Permittee to post additional “Warning Signs” as needed and may assist in removal of the signs.

(3) Public Access

When or where standing wastewater cannot be removed from the ground, public access shall be limited by barricades or other means.

(4) Special Sampling of Surface Waters

(a) The Permittee shall conduct bacteria (Enterococci and either *Clostridium perfringens* or fecal coliform) sampling in discharges greater than 100 gallons, or when public health may be threatened, in the area of the receiving water affected by the discharge, as soon as possible. The results shall be submitted to the Director immediately after the Permittee receives the bacteriological report. Monitoring shall continue until notification to stop is received from the Director.

(b) The Director shall be informed of the location of sampling stations and may modify the number of stations and site selection.

(c) The Director may require additional bacteria monitoring by the Permittee to supplement their existing monitoring program, as necessary or appropriate.

## K. LOCATION AND ZOM AND RECEIVING WATER STATION MAPS

(See Figures 1, 2, 3, and 4)

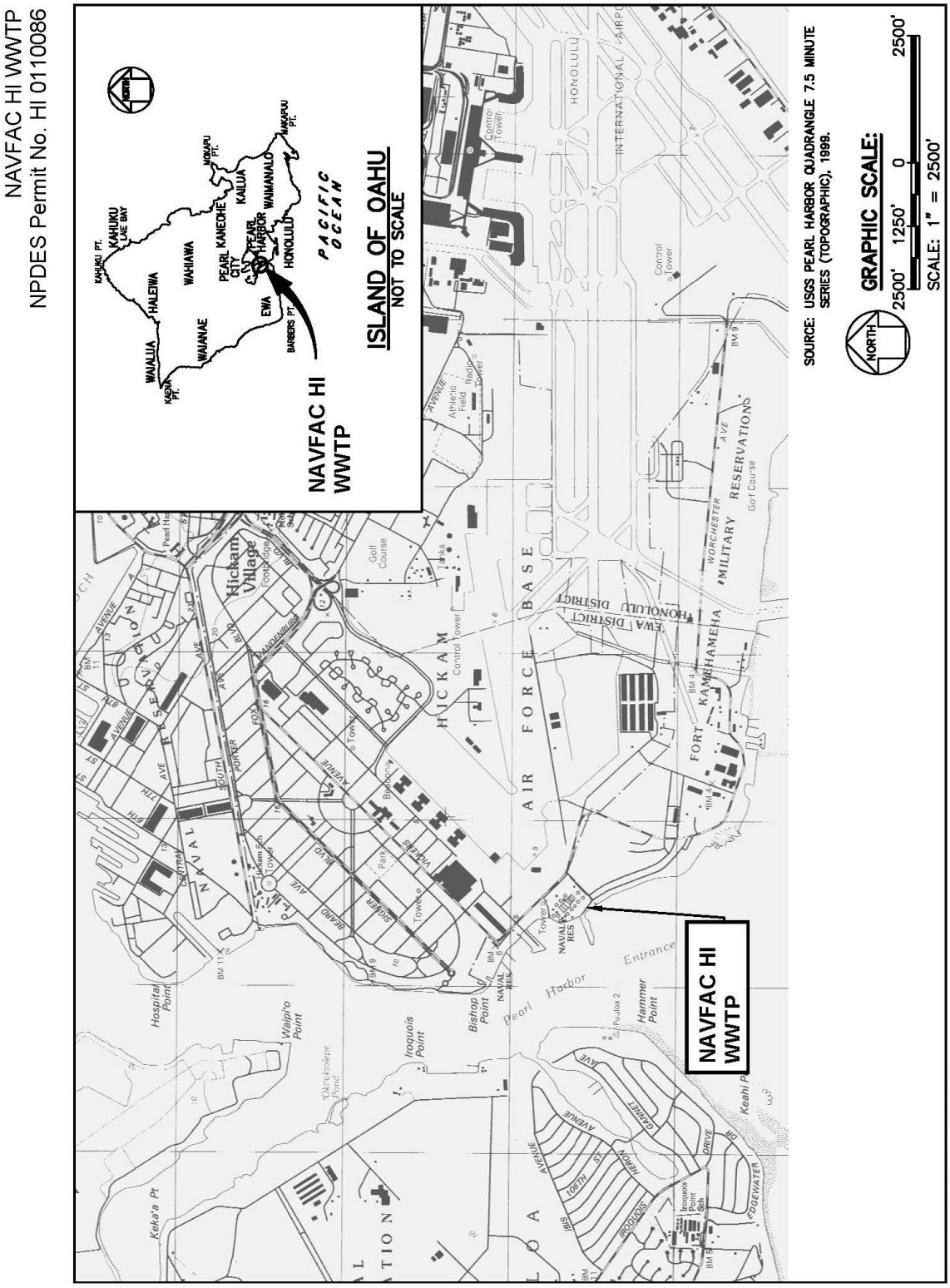


Figure 1. Location Map

**Figure 1 – Location Map**

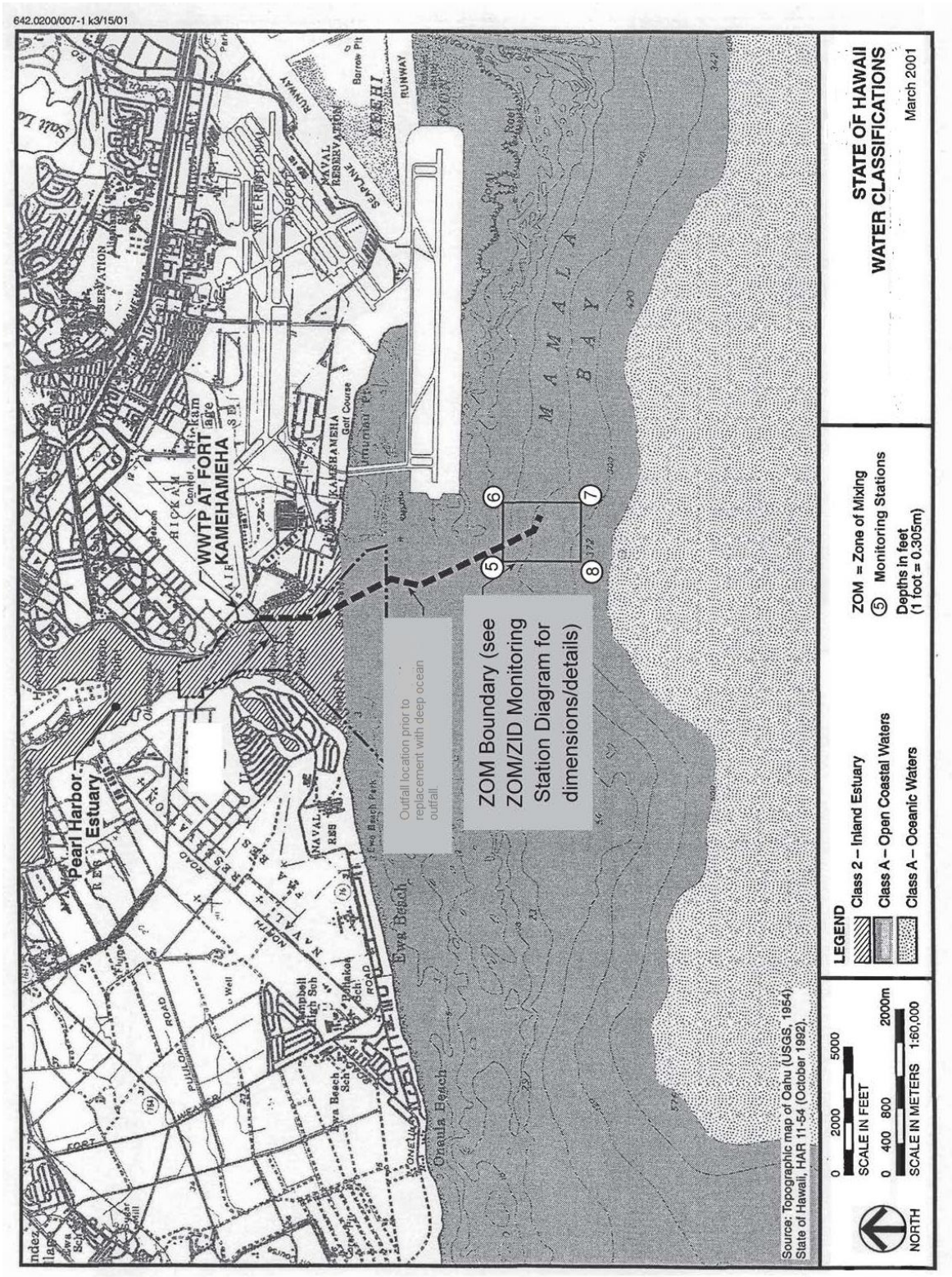


**Figure 2 – Location and ZOM**

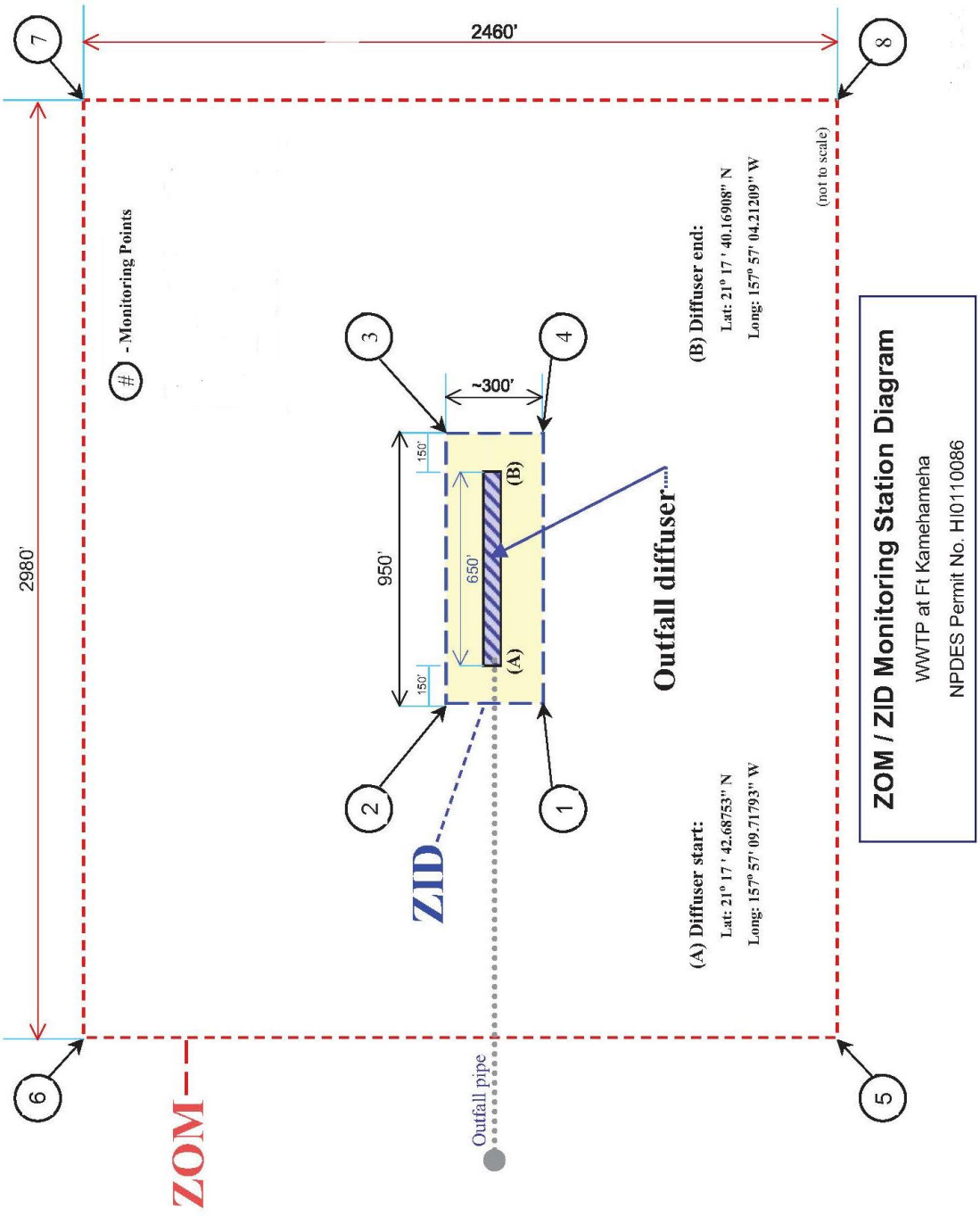


**Figure 3 – ZOM/ZID Monitoring Station Diagram**

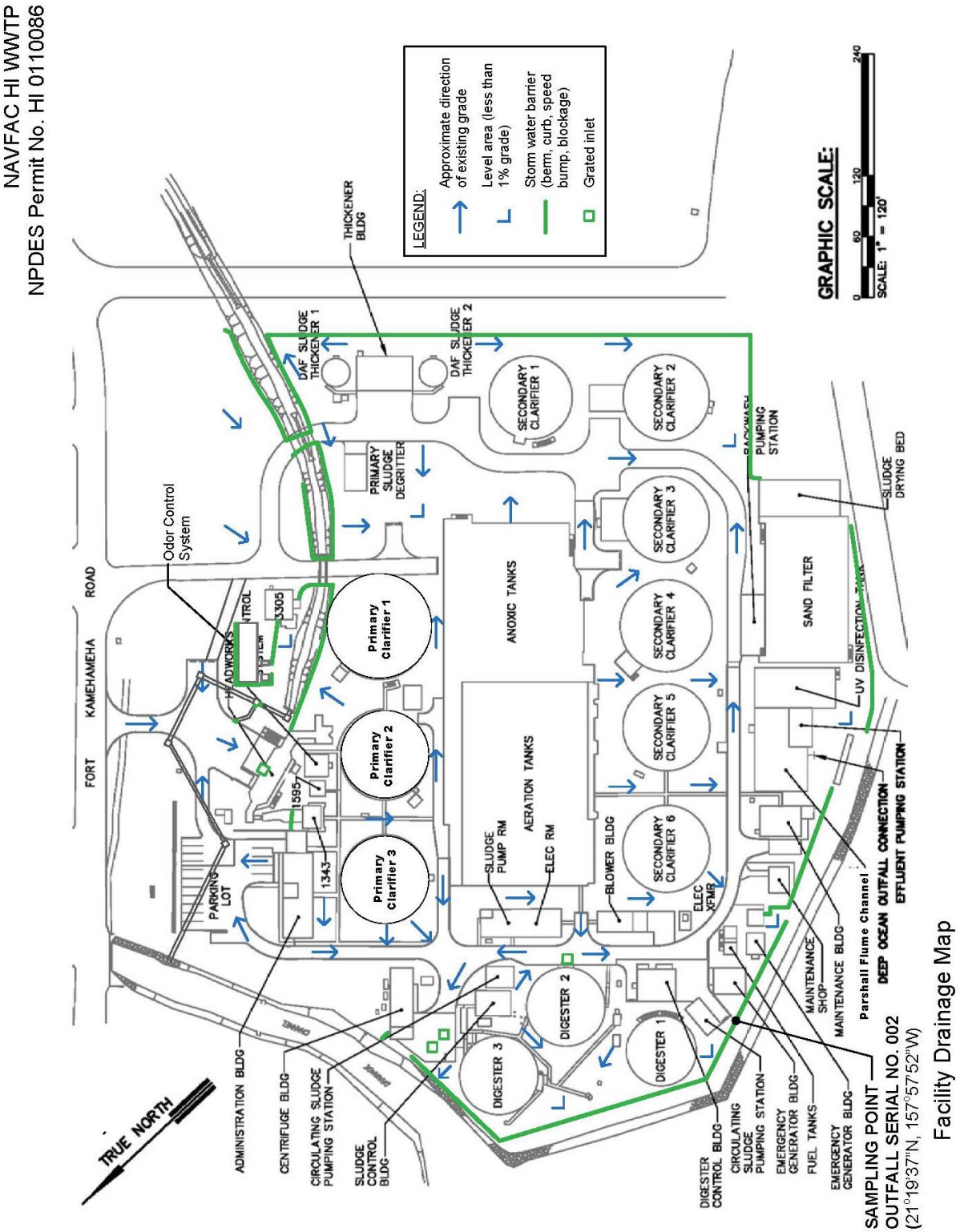


**Figure 4 – Facility Site and Drainage Map**

## APPENDIX 1 – MONITORING METHODS

| Discharge Parameter | Sample Type | Analytical Method | Chemical Abstract No. |
|---|---|---|---|
| ***Metals*** | | | |
| Antimony | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-36-0 |
| Arsenic | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-38-2 |
| Beryllium | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-41-7 |
| Cadmium | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-43-9 |
| Chromium (VI) | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 18540-29-9 |
| Copper | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-50-8 |
| Lead | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7439-92-1 |
| Mercury | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7439-97-6 |
| Nickel | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-02-0 |
| Selenium | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7782-49-2 |
| Silver | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-22-4 |
| Thallium | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-28-0 |
| Zinc | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7440-66-6 |
| ***Pesticides*** | | | |
| Aldrin | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 309-00-2 |
| Chlordane | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 12789-03-6 |
| Dieldrin | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 60-57-1 |
| 4,4'-DDT | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 50-29-3 |
| 4,4'-DDE | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 72-55-9 |
| 4,4'-DDD | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 72-54-8 |
| Alpha-Endosulfan | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 959-98-8 |
| Beta Endosulfan | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 33213-65-9 |
| Endosulfan Sulfate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 1031-07-8 |
| Endrin | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 72-20-8 |
| Endrin Aldehyde | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7421-93-4 |
| Heptachlor | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 76-44-8 |
| Heptachlor Epoxide | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 1024-57-3 |
| Alpha BHC | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 319-84-6 |
| Beta BHC | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 319-85-7 |
| Delta BHC | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 319-86-8 |
| Gamma BHC (Lindane) | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 58-89-9 |
| Toxaphene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 8001-35-2 |
| PCB 1016 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 12674-11-2 |
| PCB 1221 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 11104-28-2 |
| PCB 1232 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 11141-16-5 |
| PCB 1242 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 53469-21-9 |
| PCB 1248 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 12672-29-6 |
| PCB 1254 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 11097-69-1 |
| PCB 1260 | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 11096-82-5 |
| ***Base/Neutral Extractables*** | | | |
| Acenaphthene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 83-32-9 |
| Acenaphthylene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 208-96-8 |
| Anthracene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 120-12-7 |
| Benzidine | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 92-87-5 |
| Benzo(a)Anthracene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 56-55-3 |
| Benzo(a)Pyrene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 50-32-8 |
| Benzo(b)Fluoranthene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 205-99-2 |
| Benzo(g,h,i)Perylene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 191-24-2 |

| Discharge Parameter | Sample Type | Analytical Method | Chemical Abstract No. |
|---|---|---|---|
| Benzo(k)Fluoranthene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 207-08-9 |
| Bis(2-Chloroethoxy)Methane | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 111-91-1 |
| Bis(2-Chloroethyl)Ether | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 111-44-4 |
| Bis(2-Chloroisopropyl)Ether | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 39638-32-9 |
| Bis(2-Ethylhexyl)Phthalate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 117-81-7 |
| 4-Bromophenyl Phenyl Ether | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 101-55-3 |
| Butyl Benzyl Phthalate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 85-68-7 |
| 2-Chloronaphthalene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 91-58-7 |
| Chrysene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 218-01-9 |
| Dibenzo(a,h)Anthracene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 53-70-3 |
| 4-Chlorophenyl Phenyl Ether | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 7005-72-3 |
| 1,2-Dichlorobenzene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 95-50-1 |
| 1,3-Dichlorobenzene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 541-73-1 |
| 1,4-Dichlorobenzene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 106-46-7 |
| 3,3-Dichlorobenzidine | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 91-94-1 |
| Diethyl Phthalate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 84-66-2 |
| Dimethyl Phthalate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 131-11-3 |
| Di-N-Butyl Phthalate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 84-74-2 |
| 2,4-Dinitrotoluene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 121-14-2 |
| 2,6-Dinitrotoluene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 606-20-2 |
| 1,2-Diphenylhydrazine (as Azobenzene) | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 122-66-7 |
| Di-N-Octyl Phthalate | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 117-84-0 |
| Fluoranthene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 206-44-0 |
| Fluorene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 86-73-7 |
| Hexachlorobenzene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 118-74-1 |
| Hexachlorobutadiene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 87-68-3 |
| Hexachlorocyclopentadiene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 77-47-4 |
| Hexachloroethane | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 67-72-1 |
| Indeno(1,2,3-cd)Pyrene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 193-39-5 |
| Isophorone | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 78-59-1 |
| Naphthalene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 91-20-3 |
| Nitrobenzene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 98-95-3 |
| N-Nitrosodimethylamine | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 62-75-9 |
| N-Nitrosodi-N-Propylamine | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 621-64-7 |
| N-Nitrosodiphenylamine | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 86-30-6 |
| Phenanthrene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 85-01-8 |
| Pyrene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 129-00-0 |
| 1,2,4-Trichlorobenzene | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 120-82-1 |
| ***Acid Extractables*** | | | |
| 2-Chlorophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 95-57-8 |
| 2,4-Dichlorophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 120-83-2 |
| 2,4-Dimethylphenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 105-67-9 |
| 4,6-Dintro-O-Cresol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 534-52-1 |
| 2,4-Dinitrophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 51-28-5 |
| 2-Nitrophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 88-75-5 |
| 4-Nitrophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 100-02-7 |
| P-Chloro-M-Cresol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 59-50-7 |
| Pentachlorophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 87-86-5 |
| Phenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 108-95-2 |
| 2,4,6-Trichlorophenol | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 88-06-2 |

| Discharge Parameter | Sample Type | Analytical Method | Chemical Abstract No. |
|---|---|---|---|
| ***Volatile Organics*** | | | |
| Acrolein | Grab | As specified in 40 CFR 136 | 107-02-8 |
| Acrylonitrile | Grab | As specified in 40 CFR 136 | 107-13-1 |
| Benzene | Grab | As specified in 40 CFR 136 | 71-43-2 |
| Bromoform | Grab | As specified in 40 CFR 136 | 75-25-2 |
| Carbon Tetrachloride | Grab | As specified in 40 CFR 136 | 56-23-5 |
| Chlorobenzene | Grab | As specified in 40 CFR 136 | 108-90-7 |
| Chlorodibromomethane | Grab | As specified in 40 CFR 136 | 124-48-1 |
| Chloroethane | Grab | As specified in 40 CFR 136 | 75-00-3 |
| 2-Chloroethyl Vinyl Ether | Grab | As specified in 40 CFR 136 | 110-75-8 |
| Chloroform | Grab | As specified in 40 CFR 136 | 67-66-3 |
| Dichlorobromomethane | Grab | As specified in 40 CFR 136 | 75-27-4 |
| 1,1-Dichloroethane | Grab | As specified in 40 CFR 136 | 75-34-3 |
| 1,2-Dichloroethane | Grab | As specified in 40 CFR 136 | 107-06-2 |
| 1,1-Dichloroethylene | Grab | As specified in 40 CFR 136 | 75-35-4 |
| 1,2-Dichloropropane | Grab | As specified in 40 CFR 136 | 78-87-5 |
| 1,3-Dichloropropylene | Grab | As specified in 40 CFR 136 | 542-75-6 |
| Ethylbenzene | Grab | As specified in 40 CFR 136 | 100-41-4 |
| Methyl Bromide | Grab | As specified in 40 CFR 136 | 74-83-9 |
| Methyl Chloride | Grab | As specified in 40 CFR 136 | 74-87-3 |
| Methylene Chloride | Grab | As specified in 40 CFR 136 | 75-09-2 |
| 1,1,2,2-Tetrachloroethane | Grab | As specified in 40 CFR 136 | 79-34-5 |
| Tetrachloroethylene | Grab | As specified in 40 CFR 136 | 127-18-4 |
| Toluene | Grab | As specified in 40 CFR 136 | 108-88-3 |
| 1,2-Trans-Dichloroethylene | Grab | As specified in 40 CFR 136 | 156-60-5 |
| 1,1,1-Trichloroethane | Grab | As specified in 40 CFR 136 | 71-55-6 |
| 1,1,2-Trichloroethane | Grab | As specified in 40 CFR 136 | 79-00-5 |
| Trichloroethylene | Grab | As specified in 40 CFR 136 | 79-01-6 |
| Vinyl Chloride | Grab | As specified in 40 CFR 136 | 75-01-4 |
| ***Miscellaneous*** | | | |
| Cyanide | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 57-12-5 |
| Asbestos (Not required unless otherwise specified) | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 1332-21-4 |
| 2,3,7,8-Tetrachlorodibenzon-P-Dioxin (TCDD) | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 1746-01-6 |
| ***Other Pesticides*** | | | |
| Demeton | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 8065-48-3 |
| Guthion | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 86-50-0 |
| Parathion | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 56-38-2 |
| Malathion | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 121-75-5 |
| Mirex | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 2385-85-5 |
| Methoxychlor | 24-Hr Composite or Grab | As specified in 40 CFR 136 | 72-43-5 |